UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION FORT WORTH, TEXAS 76193-0100

DENIAL OF EXEMPTION

By letter dated July 7, 1993, Erik C. Gullikson, President, Airlink, Inc. (Petitioner), 4030 E. Iona Rd., Idaho Falls, Idaho 83451, has petitioned for an exemption from § 27.1 of the Federal Aviation Regulations (FAR) to allow normal operations of an Agusta Model A109K2 helicopter, Serial No. (S/N) 10017, at gross weights exceeding 6,000 pounds (2721 Kilograms (kg)). Petitioner desires to operate the helicopter up to a maximum gross weight of 6,284 pounds (2850 kg). The Agusta Model A109K2 helicopter type design was FAA approved by amendment to Type Certificate No. H7EU on January 15, 1993, for an approved maximum gross weight of 5,997 pounds (2,720 Kg). A letter dated July 8, 1993, from Air Idaho Rescue (Advocate) also accompanied the petition.

Petitioner requests relief from § 27.1 of FAR Part 27. This standard contains certain paragraphs that are paraphrased as follows:

Section 27.1 (a). This part contains the airworthiness standards for normal category rotorcraft with maximum weights of 6,000 pounds (2721 Kg) or less.

Section 27.1 (b). This paragraph states that persons who apply for a normal category rotorcraft airworthiness certificate must meet the applicable requirements contained in FAR Part 27.

FAR Part 36 contains the noise standards for civil aircraft. Appendix J is the optional standard for helicopters under 6,000 pounds gross weight, and Appendix H is the standard for all helicopters.

Associated FAA Air Taxi and Commercial operating rules that apply to Petitioner, and to the use of rotorcraft, which relate to this petition, are paraphrased as follows:

Section 91.9(a). No person may operate a civil aircraft (rotorcraft) without complying with

(1) the operating limitations specified in the approved Rotorcraft Flight Manual (RFM)

- (2) markings, and
- (3) placards.

Section 91.9(b)(1). No person may operate a U.S. registered civil aircraft (rotorcraft) unless an approved RFM is available in the rotorcraft.

Section 135.141. This applicability rule prescribes the aircraft and equipment requirements for Air Taxi and Commercial operations. This rule states that it supplements the aircraft and equipment requirements of FAR Part 91 but does not require duplication of the requirements. The two rules previously cited are invoked by this reference.

In support of the petition, Petitioner, and Advocate provided the following information:

Airlink, Inc., operates the helicopter for Air Idaho Rescue in a dedicated 24 hour-a-day licensed Emergency Medical Service (EMS) operation under FAR Part 135 Air Taxi Operating Rules. The service area is a large, primarily rural, area with two national parks and several national forest recreation areas. This service area is characterized as vast. The petitioner acquired the Agusta Model A109K2, S/N 10017, twinengine normal category helicopter to replace a Bell Model 206L-3 single engine normal category helicopter. The twin-engine Model A109K2 provides additional safety in the high altitude operating environment and also provides the capability to carry two patients. Limiting the maximum gross weight of the Model A109K2 to the approved 5,997 pounds has limited the Petitioner's service and the anticipated usefulness of the helicopter, as well as prevented them from simultaneously carrying two patients on 12 occasions since May 1, 1993 (approximately 2 months). Advocate notes that 13 patients experienced a delay in care within a 60-day period as a result of the 5,997-pound maximum gross weight limitation.

The maximum gross weight increase to 2,850 Kg (6,285 pounds) will enable the Petitioner to completely use the available fuel tank capacity and aircraft capabilities to complete 95 percent of their typical missions without refueling and, under most circumstances, to carry two patients when necessary.

Flight Manual Supplement, Appendix 8, submitted with the petition was reported to be approved by the Swiss and Italian Airworthiness Authorities (RAI). Appendix 8 allows a Swiss Air Rescue organization (REGA) to operate the Model Al09K2 in the Swiss Alps at a maximum gross weight of 2,850 Kg (6284 pounds). Petitioner stated that Agusta is working towards FAA approval (of Appendix 8) for the Model Al09K2 helicopter.

Petitioner states Supplement 1 to the Model A109K2 RFM, published by Agusta, also includes information about a gross weight of 2,850 Kg. and associated limitations and other operating information considered appropriate by Agusta. Petitioner makes no claim of RAI or FAA approval

of this RFM supplement. (Supplement No. 1 was not submitted with the petition.)

Petitioner submitted a copy of an Agusta Aerospace Corp. letter dated March 16, 1993, sent to Director of Operations, Air Idaho Rescue, the advocate. Enclosures listed in that letter were not submitted with the petition. That letter states that (1) Agusta properly substantiated the Model A109K2, 2,850 Kg (6,284 lbs) maximum gross weight configuration, (2) Agusta thinks Supplement No. 1 of the RFM reflects the limitations and information that support the increase in maximum gross weight, (3) The RAI supervised the certification process for the higher gross weight, and (4) Agusta submitted a similar petition to the FAA and RAI for an exemption from § 27.1. Agusta also offered their services to support an application by Advocate for FAA approval of the Model A109K2, 2,850 kg (6,248 pounds) maximum gross weight configuration.

PETITIONER'S VIEWS

EFFECT ON SAFETY

Petitioner would operate the helicopter in accordance with RFM Appendix 8, which is RAI approved, and not Supplement 1. The petitioner believes documentation submitted with the petition letter and the operating history of the Swiss Alps operation reveals that no compromise will exist in safety or in performance of the Model Al09K2 when operated at the 2,850 Kg (6,284 lbs) maximum gross weight. Advocate also claims the Model Al09K2 will operate safely at the heavier gross weight as it does in the Swiss Alps.

PUBLIC INTEREST

Granting Petitioner a one-time (one rotorcraft) increase in the maximum gross weight as requested will directly benefit the public by enabling Advocate to deliver advanced life support care to critically ill or injured patients in a much more timely manner. In addition, Advocate noted that a grant of the petition would allow Advocate to deliver rapid and efficient care to hundreds of critically ill and injured patients each year.

Advocate also contends that their rotorcraft provides the only access to prehospital advanced life support and rapid access to life-saving medical treatment for thousands of visitors and residents in the Southeastern portion of Idaho.

PUBLICATION OF THE PETITION SUMMARY

Petitioner argues that the licensed EMS operation is good cause under $\S 11.25(b)(1)$ to forego notice of the petition in the <u>Federal Register</u> and to dispose of the petition sooner than 120 days from receipt by the FAA. Advocate also supports the petition and urges the FAA to expedite the exemption process.

A summary of a similar petition for exemption from § 27.1(a) was published in the <u>Federal Register</u> on February 5, 1992 (57 FR 4508), as stated

in Denial of Exemption No. 5638, Regulatory Docket No. 005SW. Since no significant issues were identified in this petition that were not already addressed in the earlier petition, which is also a good cause stated in § 11.27j(3)(i), a summary of the petition for exemption was not published in the <u>Federal Register</u>.

The FAA analysis/summary follows:

The following certification information about the Agusta Model A109 series type design is considered pertinent to this petition. Type Certificate No. H7EU was issued for the normal category (FAR Part 27) Agusta Model A109 helicopter on June 6, 1975. This type certificate was issued in accordance with § 21.29 for import products. This procedural standard, in part, requires the RAI to certify that the product has been examined, tested, and found to meet the various requirements stated in the certification basis listed on the Type Certificate Data Sheet No. H7EU. These requirements include FAR Part 27 and the noise requirements of FAR Part 36. The original maximum certificated gross weight of the Agusta Model A109 was 2,540 Kg (5,400 lbs). The certificate was subsequently amended to add other models, and the A109C and A109K2 models are presently certificated to 2,720 Kg (5,997 lbs) maximum gross weight.

In April 1992 the FAA solicited comments from interested parties on the subject of revising the present 6,000-pound maximum gross weight limit, passenger seat limit, and minimum safety standard criteria related to FAR Part 27 Normal Category Rotorcraft Standards. Twenty-two commenters representing rotorcraft manufacturers, operators, and civil airworthiness authorities of other countries raised many issues in response to that solicitation.

The FAA has given careful consideration to Petitioner's and Advocate's justification, information, and arguments contained in and submitted with the petition for exemption from § 27.1 of the FAR. The petition specifically encompasses exemption from both § 27.1(a), the 6,000-pound (2,721 Kg) maximum gross weight limit, and § 27.1(b), the airworthiness standards in FAR Part 27, that apply to any normal category rotorcraft. While not specifically mentioned in the petition, an increase in the maximum gross weight would also be impacted by the requirements of FAR Part 36; Noise Standards: Aircraft Type and Airworthiness Certification.

The FAA also considered the comments received in response to the earlier petition for exemption (Denial of Exemption No. 5638) and to the "solicitation from interested parties" comments on changing the FAR Part 27 standards. Two commenters for the earlier petition suggested that amending § 27.1(a) should be the subject of a careful study, which involves all affected parties, and should not be driven by unanticipated gross weight growth in a particular helicopter design.

The fact that Agusta Aerospace offered their services to provide technical assistance to Idaho Air Rescue to petition for an exemption from the maximum gross weight limitation is only a factor to consider when evaluating the whole petition. Operating the helicopter in

accordance with the Model A109K2 RFM Appendix 8 (which is approved by the RAI to allow a Swiss operator, REGA, to use the Model A109K2 at maximum gross weights above 6,000 pounds) may or may not comply with applicable FAA airworthiness standards. According to the operating rules of §§ 91.9(a) and (b) and 135.131, the helicopter must be operated in accordance with an FAA approved RFM supplement or appendix. In summary, an exemption to § 27.1(b) would effectively allow Petitioner to use the 2,850 Kg (6,285 lbs) maximum gross weight without any FAA approval.

The FAA acknowledges that granting an exemption from § 27.1 would probably increase the potential usefulness of the Model A109K2, S/N 10017, to the operator. However, the extent of the improvement in service to the public is difficult to quantify using the limited information provided by Petitioner and Advocate. For example. helicopters are often used to transfer stable patients from one medical facility to another. The data provided in the petition does not discuss the nature and impact of the cited delays on patients. A short delay by itself might have little effect. Alternate transportation by ground vehicle, although slower, might be satisfactory and actually result in an overall cost savings to the health care system. Likewise, stating that 95 percent of the typical missions could be completed if the aircraft maximum gross weight limitation were increased is vague and open ended. The percentage completed at the existing maximum gross weight may be nearly the same. Again, the limited information provided in the petition makes it very difficult to evaluate the public interest impact.

However, from available information, the FAA has determined that the public interest would probably be only marginally served and then only in the area served by Petitioner. Petitioner and Advocate would probably be the principal beneficiaries of a grant of exemption. Petitioner should have been aware of the FAA approved operating limitations and the operating capabilities of the Model Al09K2, S/N 10017, helicopter prior to accepting it. Other FAA approved commercial helicopter designs with the desired operating capabilities could have been selected by Petitioner. Petitioner and Advocate are not unique from other aircraft operators, including helicopter and airplane EMS operators that encounter restrictions of their operations due to a certified maximum gross weight limit, an aircraft center-of-gravity limit, or other operating limitation of their particular aircraft.

FAA CONCLUSION

Based on the preceding discussion, the FAA has determined that a grant of exemption from § 27.1 of the FAR, as petitioned, has not been adequately justified nor clearly shown to be in the public interest. The FAA has further determined that safety may be adversely affected by the grant of the exemption. In view of the earlier petition for exemption from the maximum gross weight limit of § 27.1(a) and the responses to the petition and the responses to the solicitation for comments to amend Part 27, the FAA is reluctant to prematurely eliminate or exclude any airworthiness standard without deliberation and public participation to assure adoption of appropriate standards. The public's interest would be properly served by

public participation, and safety issues could be properly raised or explored in a public forum. Such a public forum has been scheduled in conjunction with the Helicopter Association International (HAI) 1994 annual convention at Anaheim, California. An announcement of the meeting and the subjects for discussion, including the subject of this petition, will be published in the Federal Register. The FAA will solicit oral and written comments on possible amendments to FAR Part 27 regarding maximum gross weight limitations above the present 6,000-pound (2,721 Kg) limitation of § 27.1(a). Petitioner and Advocate will be advised of this public forum.

Therefore, pursuant to the authority contained in §§ 313(a) and 601(c) of the Federal Aviation Act of 1958, delegated to me by the Administrator (14 CFR 11.53), the petition by Air Link, Inc., for an exemption from § 27.1 of the FAR to allow normal operation of an Agusta Model A109K2, S/N 10017, at maximum gross weights exceeding 6,000 pounds (2,721 Kg) is hereby denied.

Issued in Fort Worth, Texas, on January 12, 1994.

James D. Erickson

Manager, Rotorcraft Directorate Aircraft Certification Service